| Index of Claims | Application/Control No. | Applicant(s)/Patent und<br>Reexamination |  |  |  |  |
|-----------------|-------------------------|--|--|--|--|--|
|                 | 10/798,484              | KIM, CHAN-KYUNG                          |  |  |  |  |
|                 | Examiner                | Art Unit                                 |  |  |  |  |
|                 | Cassandra Cox           | 2816                                     |  |  |  |  |

|          |          | <u> </u> |              |          |  |              | ]  |  | _            |              |        |  |          |               |          |          |              | ᆫ        | ــــــــــــــــــــــــــــــــــــــ |                 |                |          |            | ш                  |          |          |         |        |                 |               |        |
|----------|----------|----------|--------------|----------|--|--------------|--|--|--------------|--------------|--------|--|----------|---------------|----------|----------|--------------|----------|--|-----------------|----------------|----------|------------|--------------------|----------|----------|---------|--------|-----------------|---------------|--------|
|          |          | _        |              |          |  | _            |  |  |              |              | 1::::: |  |          |               |          |          | _            |          |  |                 | <b>—</b> ::::: |          | 1 -!       | T -                |          |          |         | 4-     |                 |               | _      |
| Cla      | aim      | _        |              |          |  | Date         | 8  | 1  | _            | _            |        | Cla  | alm      | -             | _        | _        | 무            | ate      |  | т               | -              | ۷_       | laim<br>T  | Н                  | _        |          | Da      | ite    | П               | $\overline{}$ | _      |
| Final    | Original | 5/29/06  |              |          |  |              | :  |  |              |              |        | Final  | Original |               |          |          |              |          |  |                 |                | Final    | Original   |                    |          |          |         |        |                 |               |        |
| 1        | 1        | =        |              |          |  | T            |  |  |              | Ī            |        |  | 51       |               |          | T        | T            |          |  | П               |                |          | 101        |                    |          |          | T       |        |                 | $\Box$        |        |
| 2        | 2        | =        |              |          |  | İΤ           |  |  |              |              |        |  | 52       |               | $\neg$   | T        | $\neg$       |          |  |                 |                |          | 102        | П                  | $\neg$   |          | Т       | Τ      |                 | $\Box$        |        |
| 3        | 3        | =        | Г            |          |  | Π            | П  |  | Г            |              |        |  | 53       |               | 丁        |          |              |          |  |                 |                |          | 103        |                    |          |          |         |        |                 |               |        |
|          | 4        | Ξ        |              |          |  |              |  |  |              |              |        |  | 54       |               |          |          |              |          |  |                 |                |          | 104        |                    |          |          |         |        |                 |               |        |
| 4        | 5        |          | Г            | П        | Г  |              |  |  | Γ            |              |        |  | 55       |               | $\Box$   |          |              |          |  |                 |                |          | 105        |                    |          |          |         |        |                 | Ш             |        |
|          | 6        |          |              |          |  |              |  |  |              |              |        |  | 56       |               |          |          |              |          |  |                 |                |          | 106        |                    |          |          |         |        | Ш               | Ш             |        |
|          | 7        |          |              |          |  |              |  |  |              |              |        |  | 57       |               |          |          | $\perp$      |          | 1_                                     |                 | _              |          | 107        |                    | $\perp$  |          |         | 1_     | Ш               | Щ             |        |
|          | 8        |          |              |          |  |              |  |  |              |              |        |  | 58       |               |          | $\perp$  | $\perp$      |          |  | Ш               | _              |          | 108        |                    |          |          | ┸       |        | Ш               | $\Box$        |        |
|          | 9        |          |              |          |  |              |  |  |              |              |        |  | 59       |               | $\bot$   |          | $\perp$      |          | ┸                                      |                 |                |          | 109        | Ш                  |          |          | 丄       |        |                 | $\sqcup$      |        |
|          | 10       |          |              |          |  | L            | L  | L  | L            | <u> </u>     |        |  | 60       | Щ             |          | ᆚ        | _            | _        |  | Ш               | _              |          | 110        |                    | $\perp$  |          | ┸       |        |                 | $\sqcup$      |        |
|          | 11       |          | Ш            | Щ        | Щ  | Ш            | <u> </u>   | _  | <u> </u>     |              |        |  | 61       | Ш             | $\perp$  | _        | 4            | $\perp$  | ــــــ                                 | $\sqcup$        | _              |          | 111        | $\sqcup$           | _        | _        | $\bot$  | $\bot$ | Ш               | $\dashv$      | _      |
| L        | 12       | L        | $oxed{oxed}$ | L        | <u> </u>   |              | <u> </u>   | $oxed{oxed}$                                     | 上            | <u> </u>     |        |  | 62       | Ш             | $\perp$  | $\perp$  | 4            | $\perp$  | 4                                      | $\sqcup \bot$   | _              |          | 112        | Ш                  | 4        | _        | $\perp$ | 4_     | Ш               | $\dashv$      | _      |
| 5        | 13       | =        | <u> </u>     | ļ        | <u> </u>   | L.,          |  | <u> </u>   | _            | $oxed{oxed}$ |        | <u> </u>   | 63       | Щ             | $\dashv$ | $\bot$   | $\downarrow$ | $\bot$   | $\bot$                                 | $\sqcup$        | 4              |          | 113        | Ш                  | $\dashv$ | $\perp$  | $\bot$  | +-     | $\sqcup$        |               | _      |
| L        | 14       | L_       | Щ            |          | <u> </u>   | <b> </b> _   | $ldsymbol{f eta}$                                | <u> </u>   | _            | <u> </u>     |        | L  | 64       | $\sqcup$      | _1       | _        | 4            | $\bot$   | +                                      | $\sqcup$        | 4              |          | 114        | $\sqcup$           | $\dashv$ | $\perp$  | +       | 4      | $\sqcup$        | $\dashv$      | _      |
| 6        | 15       | =        | L            |          | _  |              |  | _  | L            | <u> </u>     |        |  | 65       |               | _        | $\perp$  | $\dashv$     | _        | +                                      | Ш               | _              |          | 115        | Н                  | $\dashv$ | $\dashv$ | +       | +-     | $\sqcup$        | $\dashv$      |        |
| 7        | 16       | =        |              |          |  |              | <u> </u>   | ــــ   | <u> </u>     |              |        |  | 66       | $\rightarrow$ | 4        | +        | +            | _        | +-                                     | ₩               | -              |          | 116        | $\sqcup$           | $\dashv$ | +        | +       | +      | $\vdash$        | ⊢⊢            | _      |
|          | 17       |          |              |          | _  |              |  | ┡  | <u> </u>     | <u> </u>     |        |  | 67       | $\dashv$      | _        | +        | +            | $\dashv$ | +                                      | $\vdash$        | -              |          | 117        | $\vdash$           | $\dashv$ | +        | +       | +      | $\sqcup$        | <del></del>   | _      |
| ļ        | 18       | _        | ldash        |          | _  | _            |  | <u> </u>   | <del> </del> | <u> </u>     |        |  | 68       | $\sqcup$      | _        | +        | 4            | _        | +                                      | $\vdash$        | -              |          | 118        | -                  | 4        | _        | +       | +      | $\sqcup$        | $\vdash$      | _      |
| <u> </u> | 19       |          | lacksquare   |          | <u> </u>   | L            | <u> </u>   | ╙  | ┡            | ┡            |        |  | 69       | $\dashv$      |          |          | +            | _        | +                                      | $\vdash$        | -              |          | 119        | -                  | _        |          | +       | +      | Н               | $\dashv$      |        |
|          | 20       | _        | Ш            |          | ļ  |              | <u> </u>   | <b>!</b>   | <u> </u>     | ┡            |        |  | 70       | $\dashv$      | 4        | 4        | -            |          | +                                      | $\vdash$        |                |          | 120        | $\sqcup$           | _        | $\dashv$ | +       | +-     | $\vdash$        | ⊢             | _      |
|          | 21       |          |              |          |  |              | L.,  | <b>—</b>   | ↓_           |              |        |  | 71       | $\dashv$      | 4        | 4        | 4            | +        | ┿                                      | $\vdash$        |                |          | 121        | $\left  - \right $ | -+       | +        | +       | +      | $\vdash \vdash$ | ⊢⊢            | _      |
|          | 22       |          |              | <u> </u> | _  | <u> </u>     | <u> </u>   | <u> </u>   | ┡            | ┢            |        | <u> </u>   | 72       |               | -+       | 4        | -            | -        | -                                      | $\vdash$        |                |          | 122        | $\vdash$           | $\dashv$ |          | +       | -      | $\vdash$        | $\dashv$      | _      |
|          | 23       |          | _            |          | <u> </u>   |              | <u> </u>   | <u> </u>   | ┡            | ⊢            |        |  | 73       | $\vdash$      | _        | +        | $\dashv$     | +        | +                                      | $\vdash$        | -              |          | 123        | -                  | $\dashv$ | +        | +       | -      | $\vdash$        |               | _      |
|          | 24       |          |              | _        | _  | <u> </u>     | <u> </u>   | ┡  | ┞            | ├            |        |  | 74       | $\dashv$      | -        | 4        | 4            | +        | +                                      | $\vdash \vdash$ | -              |          | 124        | -                  | $\dashv$ | +        | +       | +      | Н               | $\dashv$      |        |
|          | 25       | <u> </u> | _            |          | ldash  | <u> </u>     | ┡  | <u> </u>   | ┡            | ┡            |        | <u> </u>   | 75       |               | -        | +        |              |          | ┿                                      |                 | -              |          | 125        | $\vdash$           | -        | -        | +       |        | Н               | $\dashv$      | _      |
|          | 26       |          |              |          | <u> </u>   |              | ⊢  | <del> </del>                                     | ┝            | ┝            |        |  | 76       | $\vdash$      | -        | +        | +            | +        | ╁                                      | $\vdash$        |                |          | 126        | $\vdash$           | $\dashv$ |          | +       | +-     | Н               |               | _      |
| <u> </u> | 27       |          |              | _        | <u> </u>   | <del> </del> | <b> </b> -                                       | <u> </u>   | ┝            | ┝            |        |  | 77       | $\dashv$      | +        | +        | +            |          | +                                      | ⊢               |                |          | 127        | $\vdash$           | 4        | -        | +       | +      | $\vdash$        |               | _      |
|          | 28       | _        |              |          | ⊢  | ├-           | ⊢  | ┡  | ⊢            | ⊢            |        | <u> </u>   | 78<br>79 | $\dashv$      | -+       | +        | +            | -        | +                                      | $\vdash$        |                | _        | 128<br>129 | $\vdash$           |          | +        | +-      | +-     | H               | $\dashv$      | -      |
| <u> </u> | 29<br>30 | _        |              | _        | ┝  | _            | _  | ⊨  | ⊢            | ⊢            |        | <u> </u>   | 80       | $\dashv$      | -+       | -+       | +            | +        | +                                      | $\vdash$        |                |          | 130        | $\vdash$           | $\dashv$ | +        | +       | ╁      | $\vdash$        | $\dashv$      | _      |
| <u> </u> | 31       |          |              | _        | $\vdash$   | -            | ┢  | $\vdash$   | ╁            | ╀─           |        | <u> </u>   | 81       | $\vdash$      | +        |          | +            |          | +                                      | $\vdash$        |                |          | 131        | $\vdash$           | -        | -        | +       | ╁      | Н               | $\vdash$      | _      |
| <u> </u> | 32       |          |              |          | H  | -            |  | $\vdash$   | ┢            | ┢            |        | <u> </u>   | 82       | $\vdash$      | $\dashv$ | +        | -            |          | +                                      | ╁               |                | _        | 132        | $\vdash$           | $\dashv$ | -        | +       | +-     | H               | $\dashv$      | —      |
| <u> </u> | 33       |          |              | _        | H  | $\vdash$     |  |  | ┢            | ┢            |        | <u> </u>   | 83       | -             | -+       | -+-      | +            | ╌        | +-                                     | ╁╌┼╴            | -              |          | 133        | Н                  | $\dashv$ |          | ╁       | +-     | $\vdash$        | $\dashv$      | _      |
|          | 34       | _        | H            | _        |  | -            | H  | ┢  | ╁            | ┢            |        |  | 84       | $\vdash$      | $\dashv$ | +        | ╅            | +        | +-                                     | $\vdash$        | -              |          | 134        | $\vdash$           | +        | +        | +       | +-     | $\vdash$        | $\vdash$      |        |
|          | 35       | _        | -            |          | H  | $\vdash$     |  | <del>                                     </del> | ╁╌           | ╁╌           |        |  | 85       | H             | $\dashv$ | $\dashv$ | $\dashv$     | +        | +                                      | $\vdash$        | -              |          | 135        | ┼╌┤                | $\dashv$ | $\dashv$ | ╅       | +      | $\vdash$        | , —           |        |
|          | 36       | -        |              | _        | <del>                                     </del> | $\vdash$     | <del>                                     </del> | $\vdash$   | ╆            | <del> </del> |        | <del>                                     </del> | 86       | -             | $\dashv$ | -+       | +            | +        | +                                      | $\vdash$        | $\dashv$       | _        | 136        | +                  | $\dashv$ | $\dashv$ | +       | +      | $\vdash$        | $\dashv$      | _      |
| $\vdash$ | 37       |          | H            | _        |  |              |  | H  | $\vdash$     | $\vdash$     |        | $\vdash$   | 87       | $\vdash$      | $\dashv$ | $\dashv$ | $\dashv$     | +        | +                                      | +               | $\dashv$       |          | 137        | $\vdash$           | $\dashv$ | +        | 十       | +      | $\vdash$        | $\vdash$      |        |
|          | 38       | $\vdash$ | Н            | _        | $\vdash$   | $\vdash$     | $\vdash$   | H  | $\vdash$     | $\vdash$     |        | $\vdash$   | 88       | $\vdash$      | $\dashv$ | +        | +            | $\dashv$ | +                                      | ++              | -              |          | 138        | Н                  | $\dashv$ | $\dashv$ | 十       | +-     | Н               | $\sqcap$      | _      |
|          | 39       | _        |              |          | П  |              |  | Н  | t            | t            |        |  | 89       | $\vdash$      | $\dashv$ | $\top$   | $\top$       | $\dashv$ | †-                                     | $\vdash$        | 1              |          | 139        | Н                  | $\dashv$ | $\dashv$ | +       | +-     | Н               | $\sqcap$      | _      |
|          | 40       | -        | Н            | _        | Н  | $\vdash$     | П  | H  |              |              |        |  | 90       | $\vdash$      | $\dashv$ | $\dashv$ | $^{+}$       | +        | +                                      | $\vdash$        | -              |          | 140        | Н                  | $\dashv$ | $\dashv$ | +       | $\top$ | П               | $\sqcap$      | _      |
|          | 41       | <u> </u> | П            |          | Г  | Т            | П  | Ħ  |              | T            |        |  | 91       | $\dashv$      | $\dashv$ | $\top$   | $\top$       | +        | $\top$                                 | $\vdash$        |                | $\vdash$ | 141        | $\vdash$           | $\dashv$ | $\top$   | $\top$  | T      | П               | $\Box$        | _      |
|          | 42       |          | Н            |          | Н  | Т            | П  |  | $\vdash$     | $\vdash$     |        |  | 92       | $\dashv$      | $\dashv$ | $\top$   | $\dashv$     | +        | +                                      | $\vdash$        | 7              |          | 142        | $\sqcap$           | 十        | $\top$   | +       | T      | П               | $\dashv$      | _      |
| $\Box$   | 43       |          | П            |          |  | T            |  |  | t            | t            |        |  | 93       |               | 十        | +        | $\top$       | 十        | $\top$                                 |                 | 7              |          | 143        | П                  | $\dashv$ | $\dashv$ | $\top$  | 1      | П               | $\dashv$      |        |
|          | 44       |          | П            |          | П  | <u> </u>     |  | П  | Г            | $\vdash$     |        | ·  | 94       |               | $\top$   |          | $\top$       | $\top$   | $\top$                                 | $\sqcap$        | 7              |          | 144        | П                  | $\neg$   | $\dashv$ | $\top$  | $\top$ | П               | $\sqcap$      |        |
|          | 45       |          |              |          |  |              |  | П  | П            |              |        |  | 95       | $\Box$        | $\dashv$ | T        | 十            |          | 1                                      | $\sqcap$        |                |          | 145        | П                  | $\dashv$ | $\neg$   | 1       | 1      |                 | $\sqcap$      |        |
|          | 46       |          |              |          |  |              |  |  |              |              |        |  | 96       |               | $\neg$   | $\top$   | $\top$       | $\neg$   | Τ                                      |                 | 7              |          | 146        |                    | $\neg$   |          |         |        | $\Box$          | $\sqcap$      | _      |
|          | 47       |          |              |          |  |              |  |  |              |              |        |  | 97       |               |          |          |              |          | $\top$                                 |                 | 7              |          | 147        | П                  |          |          |         |        | $\Box$          | $\Box$        |        |
|          | 48       |          |              |          |  |              | П  | Γ  | Γ            | Γ            |        |  | 98       |               | $\top$   | T        | T            |          | Т                                      | П               | 7              |          | 148        |                    | $\neg$   |          | Т       |        | $\Box$          |               |        |
|          | 49       |          |              |          |  |              |  |  |              |              |        |  | 99       |               | $\Box$   | 1        | $\top$       |          |  |                 |                |          | 149        |                    | $\Box$   |          |         | 1      | $\Box$          | $\Box$        | $\Box$ |
|          | 50       |          |              |          |  |              |  |  |              |              |        |  | 100      |               | $\neg$   | T        | T            | $\top$   | T                                      | П               | 7              |          | 150        | П                  | $\neg$   | $\neg$   | Т       | $\top$ | П               | $\neg$        | _      |